

June 2019

## **What Is Cancer?**

Cancer is not one disease, but a group of diseases. For example, lung cancer is a completely different disease than colorectal cancer. All cancers have one thing in common, they can grow and spread uncontrollably if not diagnosed at an early stage and properly treated.

Cancer is caused by many things, like smoking, poor diet, and/or family history. The greatest risk factor for any cancer is increasing age. The risk of getting cancer increases with age. The risk of developing cancer differs for men and women. In the United States, one out of two men and one out of three women will have cancer in his or her lifetime.

## **What Is Cancer Incidence?**

Cancer *incidence* is a measure of how many *new cancer cases* occurred in a certain period of time. A cancer *incidence rate* tells how many cancers were diagnosed per 100,000 people in the population. (For example, a cancer incidence rate of 400 means that for every 100,000 people, 400 were diagnosed with cancer).

Incidence rates can be *age-adjusted*, meaning that the age structure of the population is taken into account when rates are calculated. Adjusting for age allows us to compare rates by removing differences in the age structure among different populations. Incidence rates shown below are age-adjusted to the 2000 US standard population.

## **What Is Cancer Mortality?**

Cancer *mortality* is a measure of how many *cancer deaths* occurred in a certain period of time. A cancer *mortality rate* tells how many people died from cancer per 100,000 people in the population. (For example, a cancer mortality rate of 150 means that for every 100,000 people in the population, 150 died from cancer).

Cancer mortality rates can also be *age-adjusted*, taking into account the age structure of the population. Mortality rates shown below are age-adjusted to the 2000 US standard population.

## **Impact of Cancer: US, SC, and SC County**

The American Cancer Society (ACS) estimates that 1,762,450 new cases of cancer will be diagnosed in the United States in 2019. This translates to 4,829 new diagnoses each day. Furthermore, an estimated 606,880 people in the United States are expected to die from cancer in 2019.

In South Carolina, ACS estimates 29,830 new cases of cancer will be diagnosed in 2019 or over 81 new cancer cases diagnosed each day, while an estimated 10,720 South Carolinians will die from cancer in 2019. The four most common cancers in SC are cancers of the lung, breast (female), prostate, and colon/rectum. The four leading cancer causes of death in SC are lung, colon/rectum, breast (female), and pancreas.

Tables 1 through 4 below show the number of new cancer cases and deaths for Barnwell County, including age-adjusted rates for cancers in the county and for the state of SC. The last column in each table shows how the county ranks in comparison to the other 45 SC counties. A rank of 1 means that a county has the highest rate of any county, while a rank of 46 means that a county has the lowest rate of any SC county. *At this time, the most recent cancer statistics for South Carolina and the United States are for new cases diagnosed in 2016. Deaths occurring in 2016 are also used.*

**Table 1** shows 5-year cancer incidence data for Barnwell County and SC for all cancers by sex and race, including Barnwell County's rank in SC compared to all other SC counties.

Table 1. Cancer Incidence by Sex and Race, 2012-2016, Barnwell County and South Carolina\*

	SC	Barnwell County		SC rank
	5-year rate	5-year rate	new cases*	
all	457	413	113	42
male	515	450	56	43
female	416	386	57	39
white	459	430	72	37
black	452	377	40	45

\*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Statistics do not include *in situ* cancers, except for bladder. Source: SC Central Cancer Registry. ~ Statistic could not be calculated (small counts).

**Table 2** shows 5-year cancer mortality data for Barnwell County and SC for all cancers by sex and race, including Barnwell County's rank in SC compared to all other SC counties.

Table 2. Cancer Mortality by Sex and Race, 2012-2016, Barnwell County and South Carolina\*

	SC	Barnwell County		SC rank
	5-year rate	5-year rate	lives lost*	
all	171	199	55	9
male	214	237	29	19
female	141	169	26	5
white	166	195	34	11
black	193	211	22	9

\*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Sources: SC Central Cancer Registry and SC Vital Records. ~ Statistic could not be calculated (small counts).

**Table 3** shows 5-year cancer incidence data for Barnwell County and SC for selected cancers, including Barnwell County's rank in SC compared to all other SC counties.

Table 3. Cancer Incidence for Selected Cancers, 2012-2016, Barnwell County and South Carolina\*

cancer	SC	Barnwell County		SC rank
	5-year rate	5-year rate	new cases*	
breast (female)	129	123	18	30
prostate (male)	115	93	12	40
lung/bronchus	65	68	19	26
colon/rectum	39	32	9	45
pancreas	13	19	5	1

\*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Statistics do not include *in situ* cancers, except for bladder. Source: SC Central Cancer Registry. ~ Statistic could not be calculated (small counts).

**Table 4** shows 5-year cancer mortality data for Barnwell County and SC for selected cancers, including Barnwell County's rank in SC compared to all other SC counties.

Table 4. Cancer Mortality for Selected Cancers, 2012-2016, Barnwell County and South Carolina\*

cancer	SC	Barnwell County		SC rank
	5-year rate	5-year rate	lives lost*	
breast (female)	22	26	4	11
prostate (male)	22	~	2	37
lung/bronchus	47	57	16	7
colon/rectum	15	14	4	39
pancreas	11	20	5	1

\*Counts are annual averages based on 5 years of data. 5-year rates are per 100,000 age-adjusted to the 2000 US standard population. Sources: SC Central Cancer Registry and SC Vital Records. ~ Statistic could not be calculated (small counts).

**Table 5** shows the percentage of cancers diagnosed in early and late stages of disease in Barnwell County and SC. Cancers diagnosed in late stages lessen the potential for successful treatment and raise the risk of premature loss of life.

Table 5. All Cancers by Stage of Diagnosis, 2012-2016, Barnwell County and South Carolina\*

	SC	Barnwell County
	Percent of all cancers	Percent of all cancers
Early Stage	49.6	45.0
Late Stage	41.3	34.8
Unknown Stage	9.2	20.2

\*Percents (proportions) shown are (rounded) based on 5 years of data. Statistics include *in situ* cancers.

Source: SC Central Cancer Registry.

### **Breast Cancer in Barnwell County**

*Among women*, breast cancer was the number 1 most commonly diagnosed cancer and the number 2 leading cause of cancer death from 2012-2016. For this 5-year period, there was an annual average of 18 new female breast cancer cases diagnosed and 4 deaths from this disease.

### **Prostate Cancer in Barnwell County**

*Among men*, prostate cancer was the number 1 most commonly diagnosed cancer and the number 2 leading cause of cancer death from 2012-2016. For this 5-year period, there was an annual average of 12 new prostate cancer cases diagnosed and 2 deaths from this disease.

### **Lung Cancer in Barnwell County**

Lung Cancer was the number 1 most commonly diagnosed cancer and the number 1 leading cause of cancer death from 2012-2016. For this 5-year period, there was an annual average of 19 new lung cancer cases diagnosed and 16 deaths from this disease.

### **Colorectal Cancer in Barnwell County**

Colorectal cancer was the number 4 most commonly diagnosed cancer and the number 3 leading cause of cancer death from 2012-2016. For this 5-year period, there was an annual average of 9 new colorectal cancer cases diagnosed and 4 deaths from this disease.

### **Pancreatic Cancer in Barnwell County**

Pancreatic cancer was the number 5 most commonly diagnosed cancer and the number 2 leading cause of cancer death from 2012-2016. For this 5-year period, there was an annual

average of 5 new pancreatic cancer cases diagnosed and 5 deaths from this disease.

### **Screening**

Men and women should speak with their doctor about the pros and cons of screening and to determine their level of risk.

The SC Best Chance Network (BCN) is a federally funded program that provides breast and cervical cancer screening, follow-up and diagnosis for low-income, uninsured women age 30 – 64, screening thousands of women each year. For more information see:

<http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/FreeCancerScreenings/>

**Notes:** Data are subject to change as data sets are updated. Rates are per 100,000 and age-adjusted to the 2000 U.S. standard population. Statistics do not include *in situ* cancers, except for bladder. The following suppression rules may have been applied to the data in the text and tables above: counts of 1-4 are recorded as less than 5; counts of 5-9 are rounded to 10. Rates based on counts fewer than 16 are suppressed (~).

### **Resources**

SC Central Cancer Registry (DHEC)

<http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/CancerStatisticsReports/>

American Cancer Society

<http://www.cancer.org/research/cancerfactsstatistics/>

CDC National Program of Cancer Registries

United States Cancer Statistics

<http://apps.nccd.cdc.gov/uscs/>

Division of Cancer Prevention and Control (DHEC)

<http://www.scdhec.gov/Health/DiseasesandConditions/Cancer/>

Division of Tobacco Prevention and Control (DHEC)

<http://www.scdhec.gov/Health/TobaccoCessation/>

SC Cancer Alliance

<http://www.sccanceralliance.org/>

### **DHEC Regions**

